

Serial No. 09/608,874

- 4 -

32909sh

REMARKS

By this amendment, claim 1 has been modified to make it more clear that the lasers used to control residual stress are used at a temperature less than the melting point of the material. This limitation was already present in dependent claim 6.

Claims 1, 2, 4, 6, 7 and 9 stand rejected under 35 U.S.C. §103(a) over Beaman et al. ('405). The Examiner concedes that Beaman does not use metal powder, but believes that it would have been obvious to use metal powder "so that an accurately built metal object could be formed." However, this argument is not consistent with the standard of rejection on obviousness grounds. There is no teaching or suggestion, in the prior art or otherwise, that the use of a metal powder increases accuracy. In fact, it would more accurate to laminate larger pieces of solid material, than the used metal powder, which may shrink, deform, and so forth, unless carefully controlled, thereby leading to an *inaccurate* rendition. Accordingly, obviousness is precluded on these grounds alone. But in addition, note that Beaman et al. do not teach the use of a second laser pass at a temperature less than the melting point for the purpose of controlling residual stress. Rather, as understood by Applicant, the point of Beaman is simply to overlap the laser beam used for sintering with the previous pass, so that thermal energy is more distributed *during melting*. Thus, obviousness is precluded on these grounds as well.

Claims 3, 5, 8 and 10 stand rejected over Beaman et al., and further in view of Murnick ('825). Though it is believed that these claims are allowable because the independent claims from which they are derived are allowable, Applicant again argues that it would not be obvious to modify Beaman et al. in view of Murnick, since there is no teaching or suggestion *from the prior art* to do so. It is well settled that in rejecting claims under 35 U.S.C. §103, the Examiner must provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art, or to combine references, to arrive at Applicant's claimed invention. There must be something *in the prior art* that suggested the combination, other than the hindsight gained from knowledge that the inventor choose to combine these particular things in this particular way. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988). In this case, given that there is no motivation to combine these references, the claims at issue should be deemed allowable.

Serial No. 09/608,874

- 5 -

32909sh

Questions regarding this application may be directed to the undersigned attorney at the telephone/facsimile numbers provided.

Respectfully submitted,

By: 

John G. Posar

Reg. No. 37,424

Gifford, Krass, Groh, Sprinkle,

Anderson &amp; Citkowski, PC

280 N. Old Woodward Ave., Ste 400

Birmingham, MI 48009

(734) 913-9300 FAX (734) 913-6007

Date: Sept. 29, 2003

GIFFORD, KRASS, GROH, SPRINKLE, ANDERSON &amp; CITKOWSKI, PC. 280 N. OLD WOODWARD AVENUE, STE. 400, BIRMINGHAM, MICHIGAN 48009-5394 (248) 647-6000